



**SECOND SUPPLEMENTAL REMEDIAL
INVESTIGATION REPORT
UNIMATIC MANUFACTURING COMPANY
25 SHERWOOD LANE
FAIRFIELD, NEW JERSEY**

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1.00 INTRODUCTION

This report presents the results of a Second Supplemental Remedial Investigation (SRI) conducted by GZA GeoEnvironmental, Inc. (GZA) for Unimatic Manufacturing Corp. (Client) at its former facility located at 25 Sherwood Lane in Fairfield, New Jersey (Site). The objective of this investigation was to assess the presence of PCBs in the groundwater at the Site and in the building's concrete floor slab.



The scope of work described in this report includes the following:

- The installation and surveying of three permanent groundwater monitoring wells;
- The collection and analysis of groundwater samples from the five on-Site permanent monitoring wells; and
- The collection and analysis of chip, wipe, and core samples of the interior concrete floor.

2.00 BACKGROUND

The following table lists areas of concern (AOCs) previously identified by GZA Site investigations:

AOC No.	AOC Name
1	Suspected 2,500-Gallon Naptha Underground Storage Tank (UST)
2	Three 250-Gallon Naptha Aboveground Storage Tanks (ASTs)
3	Fuel Oil UST
4	Empty Drum Storage Area
5	Wastewater Pipes
6	Fill Material
7	Former Interior Trenches
8	Septic Systems
9	Leaking Drum

AOC 3 has been closed by the NJDEP. AOCs 7 and 8 are currently open and are discussed in GZA's response letter to the NJDEP November 9, 2004 comment letter, which is being submitted along with this Second SRI Report. AOCs 5, 6, and 9 are currently open and are discussed in this Second SRI Report. AOCs 1, 2, and 4 are currently open and are discussed in GZA's RIWP Report, which accompanies this Second SRI Report.

The sections below describe groundwater (AOC#5) and indoor (AOC#7) investigations conducted by GZA.

2.10 GROUNDWATER - AOC NO. 5

As reported in GZA's October 29, 2002 Remediation Investigation Report / Remedial Action Workplan (RIR/RAWP), permanent groundwater monitoring wells MW-1, MW-2,



and MW-3 were installed at the Site to assess groundwater conditions. The wells were installed so that the screened interval crossed the top of the water table, located between 16 and 22 feet below grade (bg).

Gauging data from the three wells indicated that the water table slopes very slightly to the northwest. PCBs were detected in MW-2 at a concentration of 22.0 ug/l, above the NJDEP Groundwater Quality Criterion (GWQC) of 0.5 micrograms per liter (ug/l). PCBs were not detected in MW-1 or MW-3 above the Method Detection Limit (MDL).

In its letter dated April 23, 2003, the NJDEP requested delineation of the PCBs detected in the groundwater in MW-2. In a letter dated July 24, 2003, the NJDEP accepted GZA's proposal to use low flow sampling procedures with a centrifugal pump to sample the groundwater at the Site. The 2003 soil excavation activities at the Site destroyed monitoring well MW-2, which was located in an area where soil excavation had occurred.

2.20 INTERIOR CONCRETE SAMPLING - AOC NO. 7

GZA's Preliminary Assessment (PA) indicated that the floor in the on-Site building was installed before the use of PCBs was eliminated circa 1979. Soil samples were collected beneath the concrete floor during the 2001 Site Investigation and 2003 Remedial Investigation. Some of the soil samples collected contained PCB concentrations above the Residential Direct Contact Soil Cleanup Criteria (RDCSCC) of 0.49 mg/kg. Section I.B.3.1 on page three of the November 9, 2004 NJDEP letter to Unimatic requested surface wipe and chip sampling of the concrete floor at the locations of the borings with PCB levels above standards.

3.00 SUPPLEMENTAL GROUNDWATER INVESTIGATION

Three groundwater monitoring wells were installed at locations approved by the NJDEP in September 2004, as depicted on the proposed monitoring well location map included as **Figure 2**. The following three subsections describe the installation process, groundwater monitoring well sampling activities, and groundwater analytical results.

3.10 GROUNDWATER MONITORING WELL INSTALLATION AND SURVEYING

On October 20, 2004, Summit Drilling Company, Inc. (Summit) of Bound Brook, New Jersey, installed permanent groundwater monitoring wells MW-4, MW-5, and MW-6 at the Site using an air rotary drill rig.

The drilling equipment was cleaned between each boring. Mr. Menachem Sokolic, GZA Environmental Scientist, observed the drilling activities. The rig advanced the boreholes to a final depth of approximately 25 feet bgs. No evidence of contamination was noted during the installation of MW-5 and MW-6, and drill cuttings were spread on-Site. GZA noted an oily odor during the installation of MW-4 between approximately 18 and 25 feet bg, and drill cuttings from this boring were placed into 55-gallon drums and stored on-Site.



The wells were constructed of 10-foot sections of 2-inch inside-diameter PVC riser and 15-foot sections of 0.010-inch machine slotted PVC screen. The wells were installed such that the screen crossed the water table, located between 15 and 18 feet bgs, during boring installation. The annular space between the screen and the native material was filled with sand, extending 3 feet above the top of the screen. A bentonite-cement slurry was placed above the sand pack, extending to the ground surface. Each well was then completed with a locking cap and a steel flush-mount casing with a concrete collar.

Following the well installations, Summit developed the wells using dedicated polyethylene tubing and a surface pump. Development water was turbid, with no observed odor, sheen, or elevated PID readings, and was stored on-Site in 55-gallon drums.

Stires Associates, P.A. (Stires), a New Jersey-licensed surveyor, surveyed the monitoring wells on October 26, 2004. On November 3, 2004, GZA gauged the wells (see **Table 1**) to prepare a groundwater contour map, which is included as **Figure 2**. The map shows that groundwater at the Site flows towards the north-northeast. Well installation logs, Summit's monitoring well records, and Form B Certification Sheets are included as **Appendix A**. A contour map reporting form is included as **Appendix B**.

3.20 GROUNDWATER SAMPLING

GZA collected groundwater samples on November 3 and 4, 2004, and followed the procedures outlined in the NJDEP Low-Flow Purging and Sampling Guidance document dated December 2003. The pump, depth-to-water meter, and sampling equipment that were introduced into the wells were decontaminated before and after each well was sampled. Once decontaminated, the pump and depth-to-water meter were lowered into the well so that the pump intake was at the depth noted in the applicable low-flow sampling data sheet, and the sample was collected from the saturated screen interval. Water quality parameters were measured using a Horiba U-22 flow-through cell. Well purge data sheets are included in **Appendix C**.

In addition to the low-flow sampling, GZA also collected a first draw sample from each well. The goal of this sampling was to assess whether a first draw sample would provide significantly different data than the low-flow purging. Since PCBs have extremely low vapor pressures (0.00006 mmHg for Aroclor 1254, according to the NIOSH Pocket Guide), dissolved-phase PCBs are likely to remain in dissolved phase when present in groundwater that is stagnant in a monitoring wellbore. Conducting groundwater monitoring without purging would save significant time and money over the course of the project, provided the results are accurate.

After the first draw sample was collected, each well was purged at a rate between 200 and 500 milliliters per minute (ml/min). The water level and water quality parameters were measured every five minutes. Drawdown levels were kept to less than 0.3 feet throughout the purging and sampling procedure. Purging continued until the following water quality parameters stabilized in three consecutive readings:



- ±0.1 for pH
- ±3% for conductivity and temperature
- ±10 mv for redox potential
- ±10% for dissolved oxygen and turbidity

Once the measurements stabilized, GZA collected a groundwater sample at a pumping rate of 100 to 250 ml/min while not exceeding a 0.3-foot drawdown. After sampling, GZA placed the groundwater samples in a cooler maintained at 4° Centigrade. The cooler was hand-delivered to Aqua Pro-Tech Laboratories in Fairfield, New Jersey (APL) for analysis using proper chain-of-custody procedures. APL is a New Jersey-certified laboratory (certification #07010). APL analyzed the subsurface soil samples for PCBs using EPA method 8082.

After removing the pump, disposable equipment was replaced for use at the next well. One field blank was collected per day of sampling. No pre-filtering was performed.

3.30 ANALYTICAL RESULTS

The Laboratory Data Packages and Quality Assurance/Quality Control (QA/QC) documentation for the groundwater sampling conducted at the Site is included as **Appendix D**, and a summary of the analytical results is included as **Table 1**. No PCBs were detected above the MDL in monitoring wells MW-1 and MW-3. Aroclor 1248 was detected in monitoring wells MW-4 through MW-6 at concentrations of 361 ug/l, 2.01 ug/l, and 10.5 ug/l, respectively. No other Aroclors were detected in the groundwater samples.

In the first draw groundwater samples, no PCBs were detected in monitoring wells MW-1 and MW-3, and Aroclor 1248 was detected in monitoring wells MW-4 through MW-6 at concentrations of 448 ug/l, 2.27 ug/l, and 25.7 ug/l, respectively.

4.00 CONCRETE FLOOR SAMPLING

This section describes the wipe, chip, and core samples collected from the Site building concrete floor (AOC No. 7).

4.10 SAMPLING LOCATIONS

GZA initially collected eleven sets of wipe and chip samples from the locations where PCBs were detected beneath the concrete floors at levels above the RDCSCC during GZA's 2001 Site Investigation and 2003 Remedial Investigation. Where wipe and/or chip sample analytical results were above the applicable standards, GZA remobilized and collected further delineation chip and wipe samples. GZA also extracted two cement core samples to investigate whether the PCB-impacted cement floor was a source of PCBs to the underlying soil.

Summary analytical results for the first round of wipe and chip samples are included in **Table 2**, and summary analytical results for the second round of wipe and chip samples are

included in **Tables 3** and **4**, respectively. The summary analytical results for the core samples are included in **Table 5**.

The laboratory data packages and QA/QC documentation for the February wipe and chip sampling event, March wipe sampling event, and March chip sampling event are included on a CD as **Appendix E**. The Laboratory Data Packages and QA/QC documentation for the March core sampling event are included as **Appendix F**.



4.20 WIPE SAMPLES

On February 7, 2005, GZA collected wipe samples WFT-1, WFT-2, WFT-3, WFT-5, WFT-6, WFT-7, and WFT-9 in the warehouse, and samples WFT-4 and WFT-10 in the receiving room (see **Figure 3**). To collect a wipe sample, GZA first attached a clean 100 cm² cardboard template surrounding the area to be sampled. The gauze from the sampling vial was removed with forceps and wetted with 5 milliliters of solvent. Then the marked sample area was wiped twice, once from left to right and then once from top to bottom. After the gauze was air-dried, it was returned to the sample vial, which was placed in a cooler maintained at 4° Centigrade. GZA gave the cooler to Severn Trent Laboratories of Edison, New Jersey (STL) using proper chain-of-custody procedures. STL is a New Jersey-certified laboratory (Certification # 12028). STL analyzed the wipe samples for PCBs using EPA Method 608.

All wipe samples collected during the first round of sampling contained PCBs at concentrations above the United States Environmental Protection Agency (USEPA) surface PCB cleanup standard of 0.01 milligrams per 100 square centimeters (mg/100cm²). Samples collected in the warehouse contained PCBs at a concentration at least one to three orders of magnitude greater than those collected in other rooms.

GZA remobilized to the Site on March 16, 2005 to delineate the surface contamination detected in the first round of wipe samples and to assess whether PCBs had impacted other areas at the facility. GZA collected 25 wipe samples throughout the facility from floor areas that receive both forklift truck and foot traffic, including the break room and office areas (see **Figure 3**).

All wipe samples collected during the March sample event contained PCBs at concentrations above the 0.01 mg/100cm² standard. Eleven samples contained PCB concentrations one order of magnitude over the standard, including those collected in the machine room, one from the pressing room, one from the shipping room, three in the warehouse, and three in the receiving room. Samples within one order of magnitude of the standard included those collected in the office and sorting room, as well as the remainder of the samples collected in the pressing, shipping, and receiving rooms.



4.30 CHIP SAMPLES

On February 7, 2005, GZA collected eleven chip samples (CFT-1 through CFT-7, and CFT-9 through CFT-12) in the areas referenced in Section 4.10 of this report (see **Figure 3**). To collect the concrete chip samples, GZA wiped the surface of a chisel with a hexane-acetone mixture to remove any surficial contamination. Using the decontaminated chisel and a mallet, the cement floor was broken to a depth of approximately one inch below grade. Concrete chips were retrieved using clean aluminum pans, which surrounded the sample area while chipping was in progress. A new disposable index card and a decontaminated brush were used to collect the sample fragments. The collected fragments were placed between several layers of cloth and were pulverized using a mallet. Each sample was collected in a disposable aluminum container and weighed. Per STL requirements, a minimum of 50 grams of pulverized cement chips were collected at each sample location. Each sample was deposited from the disposable aluminum container to a labeled sample vial. After sampling, the chip samples were placed in a cooler maintained at 4° Centigrade, and submitted to STL for analysis using proper chain-of-custody procedures. STL analyzed the chip samples for PCBs using EPA Method 8082.

The analytical results were compared to the USEPA bulk product waste standard of 50 mg/kg in accordance with USEPA 40 CFR Section 761.3. Samples collected in the warehouse contained PCBs at a concentration at least one to two orders of magnitude greater than those collected in other rooms. The only samples that exceeded the 50 mg/kg standard were located in the warehouse.

GZA remobilized to the Site on March 16, 2005 to horizontally delineate the first round of chip sample exceedences. The sampling locations are indicated on **Figure 3**. GZA used a coring machine to penetrate the first inch of concrete. Afterward, GZA utilized the same methodologies performed during the February sampling event to obtain the chip samples. The coring machine methodology is described in Section 4.40 of this report.

The chip samples collected in the warehouse contained PCBs at concentrations at least one to two orders of magnitude greater than those collected in other rooms. Six of the seven samples collected in the pressing and receiving rooms contained a PCB concentration below 50 mg/kg. The remaining sample containing a PCB concentration above 50 mg/kg was located in the pressing room.

4.40 CORE SAMPLES

On March 16, 2005, GZA used a floor-mounted concrete corer equipped with a four-inch coring bit to collect two cores the full thickness of the concrete floor in the warehouse. The objective of this core sampling was to determine whether the presence of PCBs detected on and in the surface of the building floor were due to a PCB source beneath the building. The warehouse floor was approximately 9 to 9.5 inches thick. Core samples FT-7 Core and FT-11 Core were installed near boreholes FT-7 and FT-11, respectively, where the highest PCB concentrations in the building floor were identified (see **Figure 3**).

The bit was decontaminated with a hexane-acetone mixture prior to and between each



coring. The corer was lubricated with Site potable water. During coring activities, excess water was isolated near the corer using rags around the machine, and removed with a wet-vacuum. Vacuumed water was placed in 55-gallon drums and temporarily stored on-Site.

After sample collection, the cores were temporarily stored in waxed paper and aluminum foil. For transport to the laboratory, the samples were taken out of the paper and foil wrapping, and placed in a Teflon bag and then into a cooler. The cooler was transported to RJ Lee Group, Inc. in Monroeville, Pennsylvania (RJL), using proper chain-of-custody procedures. RJL sliced the cores into two-inch long horizontal portions except for the bottom of the cores, which were less than two inches in length. RJL analyzed the core samples for PCBs using EPA Method 8082.

PCB concentrations in Samples FT-7 Core and FT-11 Core are shown in the opposite table. PCB concentrations in FT-7 Core dropped by two orders of magnitude below four inches bg. PCB concentrations in FT-11 Core dropped by three orders of magnitude below six inches bg. At 6 inches bg, both cores exhibited PCB concentrations below the USEPA bulk product waste standard.

	FT-7 CORE	FT-11 CORE
Depth	Concentration (mg/kg)	
Top (0-2)	25,000	3,200
2-4	12,000	24,000
4-6	720	27,000
6-8	5.2	36
Bottom (8-End)	11	60

4.50 QC BLANKS

The field blanks for the first and second round of wipe and chip sampling activities contained PCB concentrations of 0.0014 milligrams per liter (mg/l) and 0.0007 mg/l, respectively, both below applicable standards.

5.00 TECHNICAL OVERVIEW

5.10 RELIABILITY OF LABORATORY DATA

The samples were transported to their respective laboratories under proper chain-of-custody procedures and the analyses were completed within the appropriate holding times. Field blanks were collected during each day of field sampling activities and analyzed for PCBs.

It should be noted that the core samples were transported to RJL in a cooler that was not maintained at 4° Centigrade. However, prior to shipment, the samples were stored in a refrigerator, and shipment was expedited so that samples arrived at the laboratory early the following day. GZA spoke with Mr. Daniel Kraft of the USEPA Region II office on April 5, 2005 to assess whether the core sample results would be valid. Mr. Kraft stated that concrete core samples do not require refrigeration during transit because of the tight concrete matrix and low volatility of PCBs.

It should also be noted that three groundwater samples, including the method blank, exhibited one surrogate above the QC limits. On May 19, 2005, GZA spoke with Mr. Brian Wood, APL QA Director, to assess whether the groundwater results are valid. Mr. Wood

stated that two surrogates were run for each sample and a maximum of one surrogate above the limits for each sample would not compromise the analytical results.

5.20 OVERALL CONTAMINATION AND OPEN AOC SUMMARY

The following table lists AOCs previously identified in GZA's 2001 Site Investigation report and GZA's assessment of their status as a result of information contained in this Second SRI report and GZA's accompanying response letter to the November 9, 2004 letter from the Department:



AOC No.	AOC Name	Status
1	Suspected 2,500-Gallon Naptha Underground Storage Tank (UST)	Closed
2	Three 250-Gallon Naptha Aboveground Storage Tanks (ASTs)	Closed
3	Fuel Oil UST	Closed
4	Empty Drum Storage Area	Closed
5	Wastewater Pipes	Open
6	Fill Material	Closed
7	Former Interior Trenches	Open
8	Septic Systems	Closed
9	Leaking Drum	Open

The remaining open AOCs will be investigated per GZA's RIWP submitted to the Department with this Second SRI Report.

6.00 WASTE STORAGE AND DISPOSAL

Drill cuttings produced during well installation activities were spread on-Site when no field indicators of contamination were observed. Drill cuttings with indicators of contamination, such as elevated PID readings or an observable sheen, were containerized in DOT-approved 55-gallon drums and stored on-Site and analyzed for proper off-Site disposal.

Development water produced during well installation and well purge water produced during groundwater sampling activities were containerized in DOT-approved 55-gallon drums and stored on-Site and analyzed for proper off-Site disposal.

On April 14, 2005, Elk Transportation for Tier De, Inc. of Gap, Pennsylvania, disposed of fifteen drums of hazardous materials produced during well installation and sampling activities and indoor remediation activities. These drums were transported to Clean Harbors, Inc. in Philadelphia, Pennsylvania. A signed waste manifest is included as **Appendix G**.

7.00 DISCUSSION

7.10 GROUNDWATER

PCBs were detected above the groundwater quality criteria in three of the five on-Site wells, and were not detected in the upgradient well (MW-1). The highest concentrations of PCBs



in the groundwater were detected in MW-4 and MW-6, which are both located in areas where the soils contain PCBs above 100 mg/kg. PCBs in the groundwater have not been delineated north of these two areas. Monitoring well MW-5, located on the northwestern portion of the Site, also contained low concentrations of PCBs in excess of the New Jersey Ground Water Quality Criteria (GWQC), although there are no documented soil exceedances in this area. However, MW-5 is downgradient of the Site building, under which PCB-contaminated soils have been documented.

Analytical results of the initial first-draw samples were consistently higher than samples collected after purging. In future sampling events, GZA will continue to purge Site groundwater monitoring wells as discussed in this report, and will not collect first draw samples.

7.20 CONCRETE FLOORING

GZA's concrete floor investigation identified elevated concentrations of PCBs above USEPA standards in the warehouse and pressing room areas. The analytical results from the wipe and chip samples indicate that the concrete floors in these areas are significantly more contaminated than the concrete floors elsewhere in the building. Core sampling indicated that PCBs were present in the first four to six inches of warehouse concrete floor, with a three to four order-of-magnitude decrease below that depth.

TABLE 1: GROUNDWATER ANALYTICAL RESULTS

**Unimatic Manufacturing Corp.
25 Sherwood Lane, Fairfield, New Jersey
ISRA Case # E20010335**

Sample ID	Ground Water Quality Criteria (ug/L)	MW-1			MW-2	MW-3			MW-4		MW-5		MW-6		Field Blank
Date Collected		7/3/02	11/3/04		7/3/02	7/3/02	11/3/04		11/4/04		11/3/04		11/4/2004		11/3/04
Depth To Water (fbg)		20.85	20.45		15.85	15.94	15.56		15.75		15.94		13.94		NA
Top of Casing		99.88			94.91	94.92			95.10		95.30		93.20		NA
Water Table Elevation*		179.03	179.43		179.06	178.98	179.36		179.35		179.36		179.26		NA
Intial/Purged		Purged	Initial	Purged	Purged	Purged	Initial	Purged	Initial	Purged	Initial	Purged	Initial	Purged	NA
Dilution Factor		1	1	1	1	1	1	1	100	50	1	1	5	5	1
<i>PCB (ug/L)</i>															
Aroclor 1242	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.5	ND	ND	ND	22	ND	ND	ND	448	361	2.27	2.01	25.7	10.5	ND
Aroclor 1254	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	0.5	ND	ND	ND	22	ND	ND	ND	448	361	2.27	2.01	25.7	10.5	ND

Notes:

Samples collected from permanent groundwater monitoring wells only

PCBs = Polychlorinated Biphenyls

Bold indicates an exceedance.

ND = Not detected above the Method Detection Limit (MDL)

ug/L = micrograms per liter

fbg = feet below top of casing

NA = Not applicable

*Water table elevation = 100 + Top of Casing - Depth to Water

TABLE 2: FIRST ROUND WIPE AND CHIP SAMPLE ANALYTICAL RESULTS SUMMARY

Former Unimatic Manufacturing Co.
25 Sherwood Lane
Fairfield, New Jersey

CHIP SAMPLES

Sample ID Lab Sample No Sampling Date Dilution Factor Units	USEPA PCB Contaminated Waste Standard (mg/kg)	CFT-1 605687 02/07/05 100 mg/kg	CFT-2 605688 02/07/05 2000 mg/kg	CFT-3 605700 02/07/05 1000 mg/kg	CFT-4 605707 02/07/05 20 mg/kg	CFT-5 605697 02/07/05 1000 mg/kg	CFT-6 605693 02/07/05 2500 mg/kg	CFT-7 605694 02/07/05 10000 mg/kg	CFT-9 605701 02/07/05 50 mg/kg	CFT-10 605708 02/07/05 50 mg/kg	CFT-11 605698 02/07/05 5000 mg/kg	CFT-12 605709 02/07/05 25 mg/kg
PCBs												
Aroclor-1016	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	50	120	2700	1300	16	860	3400	9200	67	44	4500	27
Aroclor-1254	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

WIPE SAMPLES

Sample ID Lab Sample No Sampling Date Dilution Factor Units	USEPA Surface PCB Cleanup Standard (mg/100cm ²)	WFT-1 605690 02/07/05 400 mg/100cm ²	WFT-2 605689 02/07/05 800 mg/100cm ²	WFT-3 605691 02/07/05 800 mg/100cm ²	WFT-4 605702 02/07/05 80 mg/100cm ²	WFT-5 605695 02/07/05 4000 mg/100cm ²	WFT-6 605705 02/07/05 4000 mg/100cm ²	WFT-7 605706 02/07/05 20000 mg/100cm ²	WFT-9 605692 02/07/05 400 mg/100cm ²	WFT-10 605703 02/07/05 160 mg/100cm ²	WFT-11 605696 02/07/05 8000 mg/100cm ²	WFT-12 605704 02/07/05 8 mg/100cm ²	FB 605699 02/07/05 1 mg/L
PCBs													
Aroclor-1016	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.01	0.78	1.2	1.5	0.11	5.1	5.7	41	0.58	0.23	14	0.016	0.0014
Aroclor-1254	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes

ND = Not Detected

mg/kg = milligrams per kilogram

2100 = Exceeds applicable USEPA PCB Standard

TABLE 3: SECOND ROUND WIPE SAMPLE RESULTS ANALYTICAL SUMMARY

Former Unimatic Manufacturing Co.
25 Sherwood Lane, Fairfield, New Jersey

Sample ID	USEPA	WP-FT-19	WP-FT-20	WP-FT-21	WP-FT-22	WP-FT-23	WP-FT-24	WP-FT-25	WP-FT-26	WP-FT-27
Lab Sample No	Surface PCB	615687	615686	615685	615684	615683	615681	615682	615676	615675
Sampling Date	Cleanup	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05
Dilution Factor	Standard	400	400	400	80	200	200	40	100	20
Units	(mg/100cm ²)	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²
PCBs										
Aroclor-1016	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.01	0.91	0.64	0.62	0.13	0.23	0.31	0.051	0.14	0.029
Aroclor-1254	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample ID	USEPA	WP-FT-28	WP-ShppRm-01	WP-ShppRm-02	WP-ShppRm-03	WP-RecvRm-01	WP-BrkRm-01	WP-BrkRm-02	WP-PressRm-01	WP-PressRm-02
Lab Sample No	Surface PCB	615674	615677	615678	615679	615680	615669	615670	615671	615672
Sampling Date	Cleanup	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05
Dilution Factor	Standard	20	200	40	40	40	8	8	8	8
Units	(mg/100cm ²)	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²
PCBs										
Aroclor-1016	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.01	0.026	0.29	0.056	0.079	0.074	0.014	0.015	0.011	0.014
Aroclor-1254	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample ID	USEPA	WP-PressRm-03	WP-SortRm-01	WP-SortRm-02	WP-MachnRm-01	WP-MachnRm-02	WP-MachnRm-03	WP-Office-01	WP-Blank
Lab Sample No	Surface PCB	615673	615664	615665	615666	615667	615668	615663	615688
Sampling Date	Cleanup	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05	3/15/05
Dilution Factor	Standard	8	8	20	200	800	80	8	4
Units	(mg/100cm ²)	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/100cm ²	mg/L	mg/100cm ²	mg/L
PCBs									
Aroclor-1016	0.01	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	0.01	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.01	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	0.01	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.01	0.014	0.013	0.041	0.24	0.98	0.11	0.013	0.0007
Aroclor-1254	0.01	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.01	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	0.01	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	0.01	ND	ND	ND	ND	ND	ND	ND	ND

Notes

ND = Not Detected

mg/100cm² = milligrams per 100 square centimeters

mg/L = milligrams per liter

2100

= Exceeds USEPA Surface PCB Cleanup Standard

TABLE 4: SECOND ROUND CHIP SAMPLE ANALYTICAL RESULTS SUMMARY

Former Unimatic Manufacturing Co. Facility
25 Sherwood Lane, Fairfield, New Jersey

Sample ID	USEPA PCB	CFT-19	CFT-20	CFT-21	CFT-22	CFT-23	CFT-24	CFT-25	CFT-26	CFT-27	CFT-28
Lab Sample No	Contaminated	615889	615890	615691	615692	615693	615694	615695	615696	615697	615698
Sampling Date	Waste	3/16/05	3/16/05	3/16/05	3/16/05	3/16/05	3/16/05	3/16/05	3/16/05	3/16/05	3/16/05
Dilution Factor	Standard	2500	500	500	5	25	20	20	50	50	25
Units	(mg/kg)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs											
Aroclor-1016	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	50	2100	480	420	7.1	19	13	23	44	62	36
Aroclor-1254	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes

ND = Not Detected

mg/kg = milligrams per kilogram

2100 = Exceeds USEPA PCB Contaminated Waste Standard

TABLE 5: MARCH CORE SAMPLE RESULTS SUMMARY

Former Unimatic
Manufacturing Co. Facility
25 Sherwood Lane, Fairfield, New Jersey

FT-7 Core Sample

Sample ID Lab Sample No Dilution Factor Units	USEPA PCB Contaminated Waste Standard	Top 3631635-T 200,000 mg/kg	2-3 Inch 3631635-M2 100,000 mg/kg	4-5 Inch 3631635-M4 5,000 mg/kg	6-7 Inch 3631635-M6 20 mg/kg	Bottom 3631635-B 100 mg/kg
PCBs						
Aroclor-1016	50	ND	ND	ND	ND	ND
Aroclor-1221	50	ND	ND	ND	ND	ND
Aroclor-1232	50	ND	ND	ND	ND	ND
Aroclor-1242	50	ND	ND	ND	ND	ND
Aroclor-1248	50	25,000	12,000	720	5.2	11
Aroclor-1254	50	ND	ND	ND	ND	ND
Aroclor-1260	50	ND	ND	ND	ND	ND

FT-11 Core Sample

Sample ID Lab Sample No Dilution Factor Units	USEPA PCB Contaminated Waste Standard	Top 3631636-T 20,000 mg/kg	2-3 Inch 3631636-M2 30,000 mg/kg	4-5 Inch 3631636-M4 30,000 mg/kg	6-7 Inch 3631636-M6 100 mg/kg	Bottom 3631636-B 100 mg/kg
PCBs						
Aroclor-1016	50	ND	ND	ND	ND	ND
Aroclor-1221	50	ND	ND	ND	ND	ND
Aroclor-1232	50	ND	ND	ND	ND	ND
Aroclor-1242	50	ND	ND	ND	ND	ND
Aroclor-1248	50	3,200	24,000	27,000	36	60
Aroclor-1254	50	ND	ND	ND	ND	ND
Aroclor-1260	50	ND	ND	ND	ND	ND

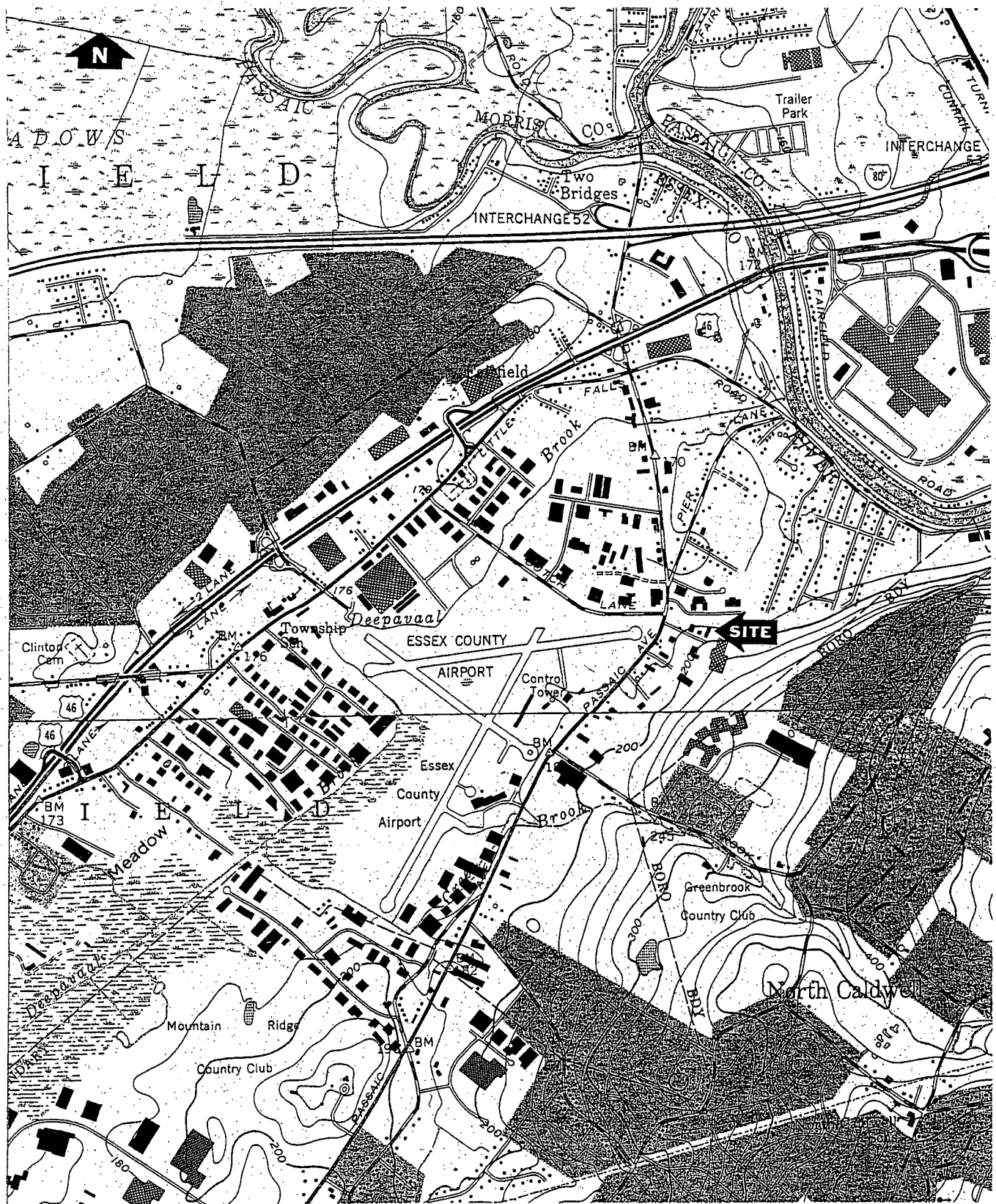
Notes

ND = Not Detected

Both cores were collected on March 16, 2005

mg/kg = milligrams per kilogram

2100 = Exceeds USEPA PCB Contaminated Waste Standard



DESCRIPTION/NOTES

Source: USGS 7.5 Minute Topographic Map
 Pompton Plains, NJ Quadrangle 1955, Photorevised 1981 &
 Caldwell, NJ Quadrangle 1954, Photorevised 1981

SITE LOCATION MAP



GZA
 GeoEnvironmental, Inc.

65 Willowbrook Blvd., Wayne, New Jersey 07470

NOTES:

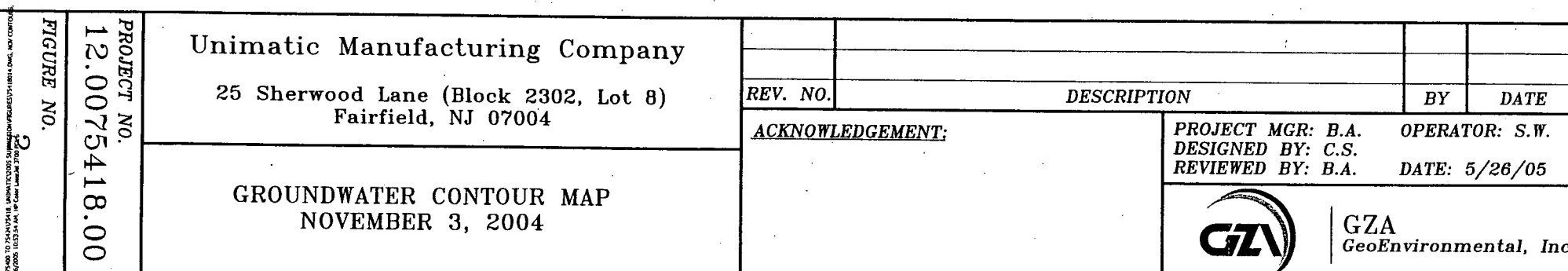
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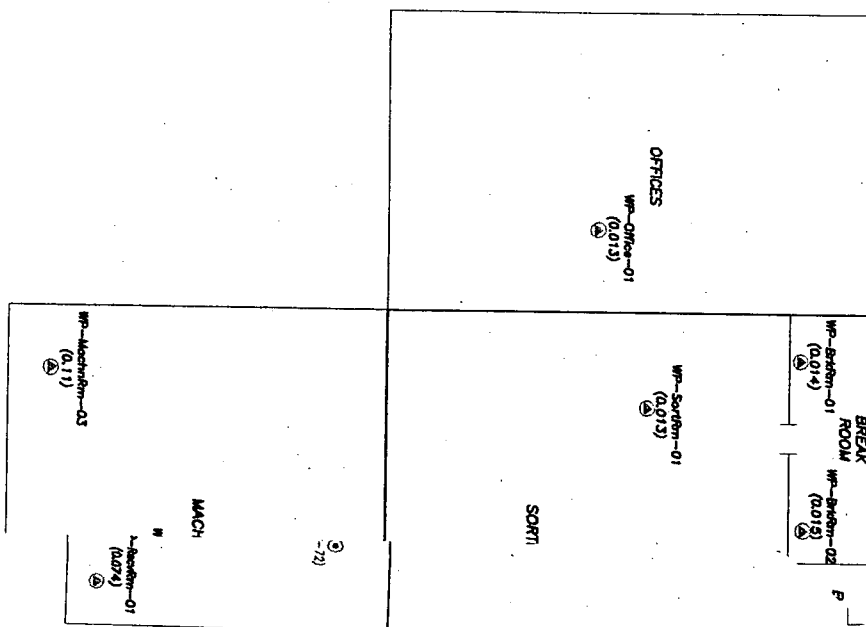
PROJECT MGR: BA
 DESIGNED BY: AH
 REVIEWED BY: MR
 DATE: 3-10-05

UNIMATIC MANUFACTURING COMPANY
 25 SHERWOOD LANE
 FAIRFIELD, NJ 07004

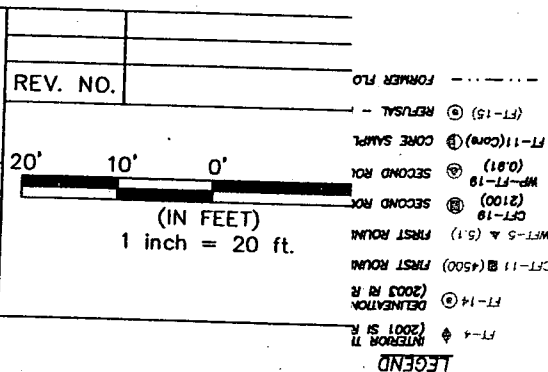
PROJECT NO.
 75418.00

FIGURE NO.
 Figure 1





NOTES:
ALL PCB SOL
MILLIGRAMS PER
ALL SAMPLE D
GRADE (mg)



UNIMATIC MANUFACTURING
COMPANY
25 SHERWOOD LANE (BLOCK 2302, LOT 8)
FAIRFIELD, NEW JERSEY 07004

INTERIOR
SAMPLE LOCATION PLAN
(AREA OF CONCERN NO. 7)

JOB NO.
12.0075418.00

SHEET NO.